

**ANNUAL OUTREACH EVALUATION REPORT
GEOGRAPHICAL AREA 5, 6 and 7
(EPA REGIONS 5, 6, 7 and 8)
Technical Assistance to Brownfields (TAB) Communities
4th Project Year**

Center for Hazardous Substance Research
Kansas State University ▪ Manhattan, KS
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Introduction and Overview

Kansas State University (KSU) completed the fourth operating year of the Technical Assistance to Brownfields (TAB) Program in Geographical Areas 5, 6, & 7 (EPA Regions 5 - 8) during April 2016 to March 2017. This report provides an evaluation of each of four tasks that comprise the TAB Program: site-specific service, workshops and webinars, online e-tools and resources, and participatory evaluation. As summarized below, TAB’s third-year goals were generally met or exceeded.

Multiple sources of data were used in evaluating the TAB Program. They include service provider documentation, participant surveys, quarterly reports, and website usage reports. Sources of data and analysis techniques are more fully described in the sections below. Data in this report may be updated as part of KSU TAB's continual evaluation process.

Task 1. Site-specific Technical Assistance to Communities

Site-specific technical assistance is the main activity of the TAB program. Sources of data for documenting services provided are quarterly reports produced by TAB program staff, based on reports from service providers. Quantitative goals for site service are listed in the table below, along with actual levels of service and an indication of whether the target goals were met.

Target goals and outcomes for site-specific service

Target goals	Outcomes	Target met
40-60 communities/year	148	Yes
One site/state/year	100%	Yes
50% with population of less than 100K	66%	Yes
25% with population of less than 10K	40%	Yes
25% environmental justice communities	24%	No*
25% special regional brownfield sites	20%	No*

*but Yes, (40%) if based on 60 communities served/year

All goals were met or exceeded, with the exception of 25% of communities served being special regional brownfields sites and environmental justice communities. Overall, TAB far exceeded its goal of total communities served (Goal 40-60, Actual 148). The number of environmental justice communities provided site services in the reporting period was 36, the same as in the previous reporting period. None of the sites served were special regional brownfield sites. If TAB had only met the maximum goal of providing services to 60 communities, these sites would represent 40% of communities served under each category. For a regional view of target goals and outcomes for site-specific services, please see Appendix A.

One hundred and forty-eight communities received site specific services during the fourth project year. An overview of the communities served is presented in Appendix A. Support to more than 73 communities served during the project period is ongoing. Nineteen sites involve sustainable reuse initiatives. Sites served comprise at least 1248 acres.

TAB provides a range of services to communities in its 21-state service area. The table below provides an overview of the types of services provided to communities during the reporting period. While all site services that TAB provides were delivered during the reporting period, the most common services

include answering questions related to EPA’s Area-Wide Planning; Assessment, Revolving Loan Fund, and Cleanup (ARC); and Job Training and non-EPA grants, document reviews, and identification of resources. For an overview of services provided in each region, please see Appendix A.

Typical site-specific services provided in reporting period and program to date (Under Revision)

Type of service provided	# of communities receiving service 2015	Cumulative # of communities receiving service 2013-18 (2015-16 Annual Report)	TOTAL Q4 plus 2015-16 cumulative totals
Attend community/stakeholder meetings or conference calls	94	78	172
Community education and engagement	31	35	66
Document review	145	178	323
Identification of resources	32	89	121
Engaging or planning to engage in visioning process	34	23	57
Provide fact sheets or sample documents	26	29	55
Facilitate stakeholder communication	130	80	210
Evaluation of redevelopment options	63	52	115
Community Workshops	12	20	32
RFP/Q Development/Review	6	20	26
Answered EPA and other grants questions	171	217	388
BIT Assistance	18	32	50
TAB EZ assistance	0	35	35

Task 1 Summation

TAB met or exceeded four of its goals for site service in the project period: total number of communities served, communities with populations of less than 100,000, communities with populations of less than 10,000, environmental justice communities. One goal not met was the percentage of special regional sites, based on the total actual number of communities served (148). However, this goal was met if based on the yearly goal for communities served (40-60 communities). Another goal was that we did not assist a community in two states (Utah and North Dakota, as the state brownfield coordinators felt cities were not currently receptive to environmental and federal programs).

A range of sites are being served including assessment, cleanup and area-wide planning. Services to approximately 73 (49%) of communities served will continue into the next reporting period. The types of services being provided most frequently (document review, identifying resources, and EPA and other

grant questions) indicate that a number of sites are in the early stages of the brownfield redevelopment process, where TAB support is useful in helping communities develop the capacity for engaging in redevelopment projects.

Task 2. Workshops and Webinars

Workshops, webinars, and invited presentations provide additional opportunities for TAB to provide communities with information and education about the brownfields redevelopment process. This section provides an overview of these activities, as well as evaluation of their effectiveness. Sources of data from this section are quarterly reports produced by TAB program staff and quantitative and qualitative data from surveys administered at workshops and webinars.

Workshops

Goals for educational workshops were to participate in 23 workshops cooperatively with others, with one in each state, if possible. During the reporting cycle, TAB was involved in a total of 30 workshops. Six workshops occurred in Region 5: four Economic Revitalization workshops and two Combined Brownfields & Grant Writing Strategies workshops. Thirteen workshops occurred in Region 6: seven Economic Revitalization workshops (including one RTOC Tribal Brownfields workshop), five Combined Brownfields & Grant Writing workshops, and one EPA Brownfields Grant Proposal Writing Strategies workshop. Five workshops occurred in Region 7: four Economic Revitalization workshops and one EPA Brownfields Grant Proposal Writing Strategies workshop. Five workshops occurred in Region 8: four Economic Revitalization workshops (including three mini-workshops) and one Combined Brownfields & Grant Writing workshop. One national Economic Revitalization workshop also occurred. A total of 1,205 participants attended these workshops. The table below provides an overview of workshops conducted in this reporting cycle.

Overview of workshops and participants

Workshop Topic	Number of Workshops						Number of Participants					
	R5	R6	R7	R8	Nat	T	R5	R6	R7	R8	Nat	T
Economic Revitalization	4	7*	4	4	1	20	146	345	153	83	70	797
EPA Brownfield Grant Proposal Writing Strategies	0	1	1	0	0	2	0	42	29	0	0	71
Economic Revitalization and Grant Strategies Combined	2	5	0	1	0	8	74	225	0	38	0	337
Totals	6	13	5	5	1	30	220	612	182	121	70	1205

*Includes one RTOC Tribal Brownfields workshop

The data below discusses the evaluation results from the 24 workshops where surveys were conducted during the reporting period and represents feedback received from 440 participants. Please note that the dataset received contained survey data from a workshop held the previous reporting year. The results below are derived from the dataset received. Data was collected using a post/retrospective survey instrument. This type of instrument is administered at the end of an event, yet asks questions about knowledge or perception prior to the event. This is believed to produce a more accurate reporting of participants' perceived changes than the traditional pre/post survey, as well as provides paired samples for more robust statistical analysis.

Population served.

Participants were asked to indicate the size of the communities they represent. The figure below shows the populations of the communities served by workshop participants.

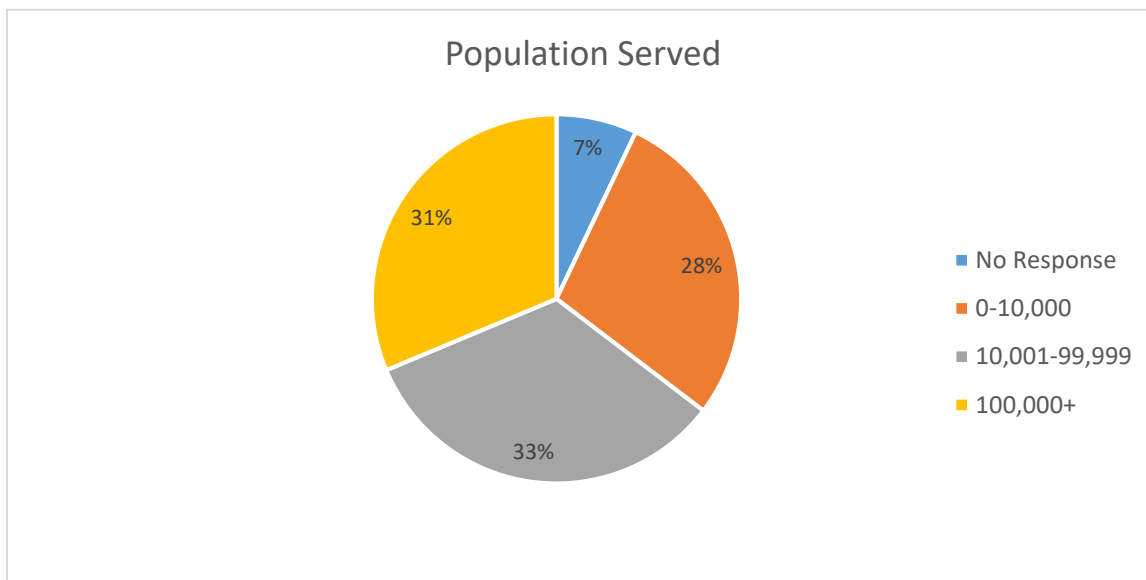


Figure 1. The sizes of populations served by workshop participants.

Workshop participants represented a range of stakeholders in the brownfields process. The most frequently represented stakeholders were city or county staff/representatives (127), consultants (87), economic development specialist or staff (58), other stakeholders (52), community development (44), and interested citizens (44). Participants were able to select as many categories as applied. For a more detailed overview of participant representation, please see Appendix B.

Workshop outcomes.

Workshop participants are asked to complete a Retrospective-Post survey form at the completion of the workshop. The survey asked questions that measure changes in participants’ knowledge about brownfields, their readiness to participate in brownfield redevelopment or grant writing, and perceptions of available resources before and after the workshop.

Useful experience.

Participants were asked to what degree they thought they would be able to use what they learned in the workshop in their jobs or communities, using a scale of one to five, where one equals not useful and five equals highly useful. The average response to this question was 4.24 on a 5-point scale. Eighty-two percent of participants rated the degree of usefulness at four or higher, with nearly half of participants choosing five. More detail on the responses is presented below in Figure 2 below.

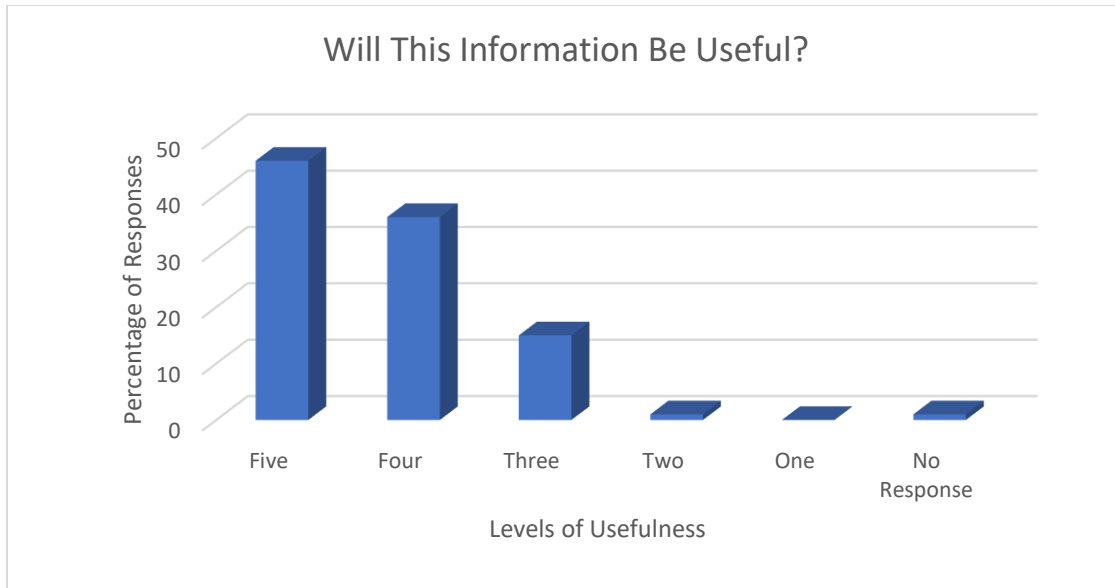


Figure 2. Level of usefulness of workshop information.

Preparedness.

Depending on the type of workshop, participants were asked how prepared they were to participate in brownfield redevelopment or write a grant for brownfields funding. Prior to the workshop, almost 37% reported their level of preparedness to be somewhat prepared to very prepared. After the workshop, 80% of participants reported their level of preparedness to be somewhat or very prepared. Analysis indicates that the participants' level of preparedness increased as a result of attending the workshop and that the change was not due to chance. The figure below provides more details about the responses to this question.

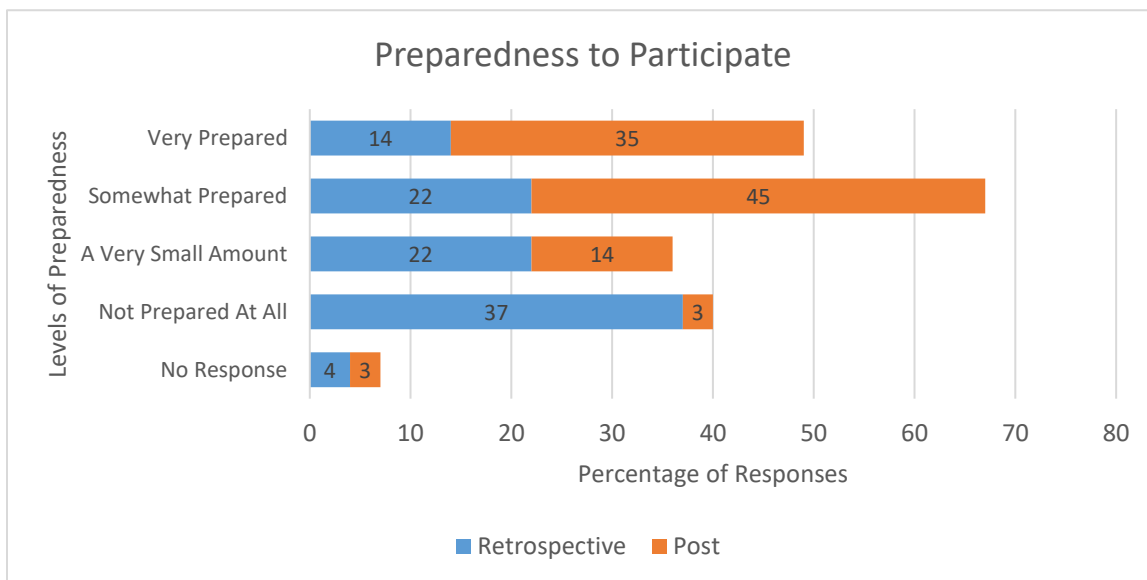


Figure 3. Changes in participants' preparedness to participate in brownfield redevelopment. Pre-workshop mean: 2.05 (SD=1.152), post-workshop mean: 3.06 (SD=.950), 4 point scale, $p < .001$.

Available resources.

Depending on the type of workshop, participants were asked about their perception of resources available to help with brownfield redevelopment or writing a brownfield grant. Prior to the workshop, 18% of participants reported they felt their cup to be at least three-fourths full. After the workshop, 57% of participants reported they felt their cup of resources to be at least three-fourths full. Analysis indicates that the participants’ perception of available resources increased as a result of attending the workshop and that the change was not due to chance. The figure below provides more details about the responses to this question.

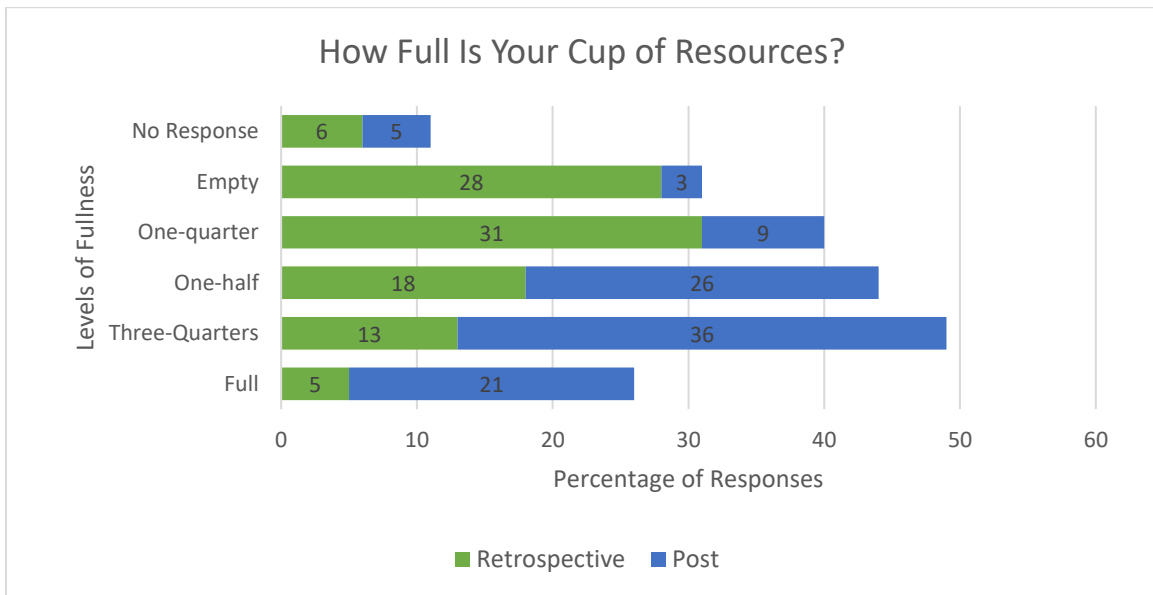


Figure 4. Changes in participants’ perception of available brownfields redevelopment resources. Pre-workshop mean: 2.20(SD=1.275), post-workshop mean: 3.49 (SD=1.259), 5 point scale, $p < .001$.

Knowledge change.

Participants in the Economic Revitalization Workshops were asked a series of questions to measure their perceived knowledge change about brownfields. The data below discusses the evaluation results from the 19 Economic Revitalization workshops conducted during the reporting period and represents feedback received from 241 participants.

Participants were asked to rate their understanding of what a brownfield is on a scale of one to five, where five equals a very high level of understanding and one a very low level. After the workshop, over 78% of participants rated their level of understanding at four or higher. Prior to the workshop, 35% rated their level of understanding at four or higher. Analysis indicates that participants perceived that their level of understanding increased as a result of attending the workshop. The figure below provides more details about the responses to this question.

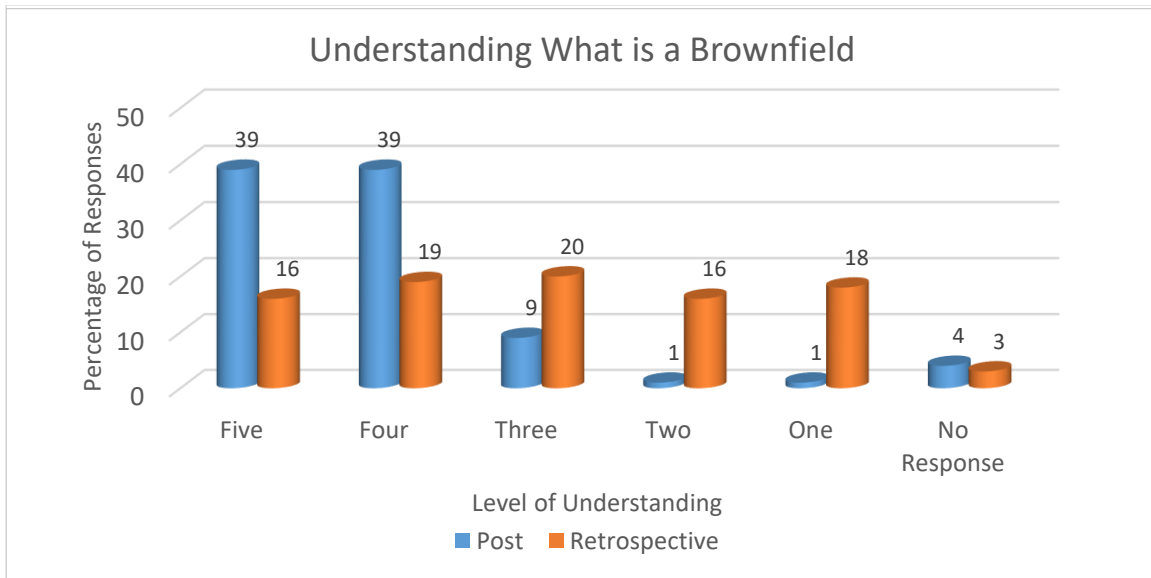


Figure 5. Changes in the level of understanding about what is a brownfield. Pre-workshop mean: 2.90 (SD=1.464), Post-workshop mean: 4.11 (SD=1.153), 5-point scale, $p < .001$.

Participants were asked about the number of brownfields sites they thought were located in their communities. After the workshop, 72% of participants reported they thought there were five or more brownfield sites in their communities. Prior to the workshop, 49% reported they thought there were five or more brownfield sites in their communities. Analysis indicates that participants' awareness of the number of brownfields located in their communities increased as a result of attending the workshop. The figure below provides more details about the responses to this question.

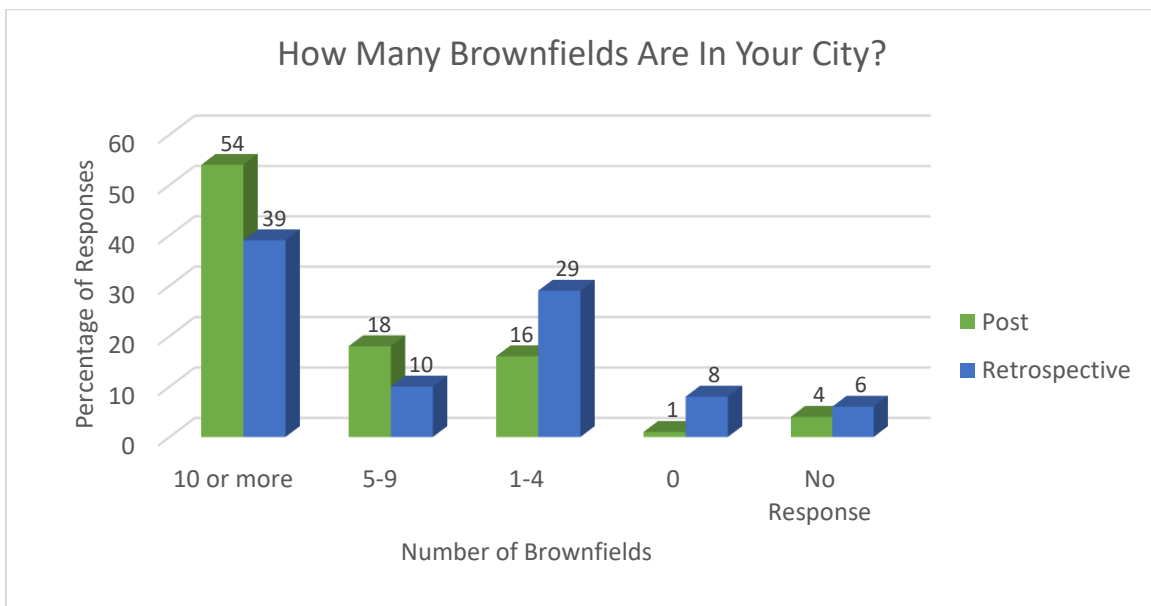


Figure 6. Changes in participants' awareness of the number of brownfields in their communities. Pre-workshop median: 3.00, post-workshop median: 4.00; $p < .001$.

Participants were asked to identify how many state or federal brownfields assistance programs were available to help communities with brownfield redevelopment. After the workshop, almost 67% of participants reported they knew of five or more programs that provide support to brownfields. Prior to the workshop, one-quarter reported they knew of five or more programs. Analysis indicates that the number of programs participants knew about increased as a result of attending the workshop. The figure below provides more details about the responses to this question.

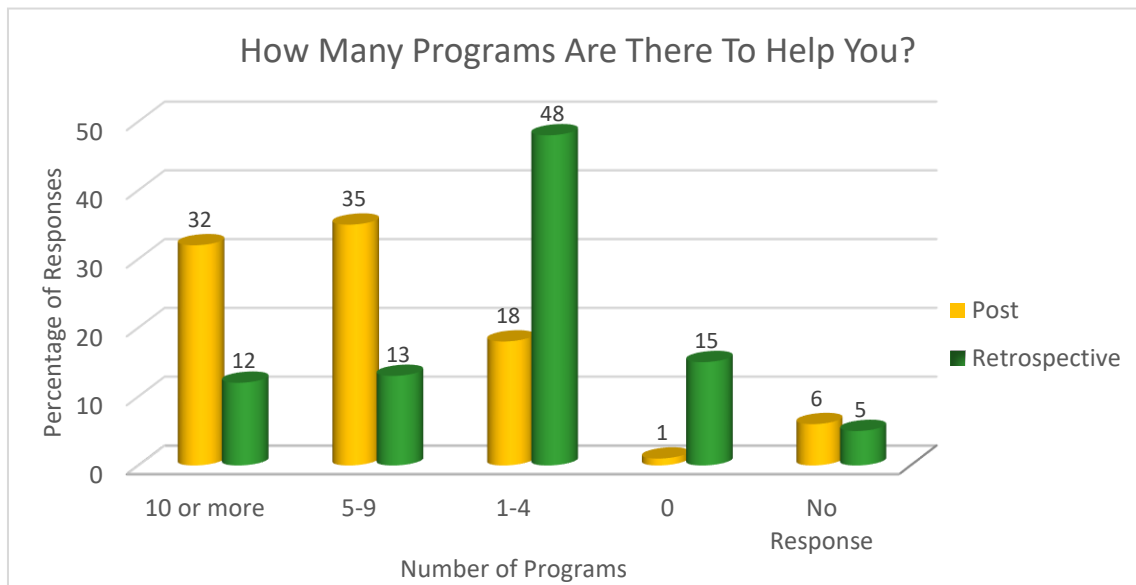


Figure 7. Changes in number of assistance programs participants knew about. Pre-workshop median: 2.00, post-workshop median: 3.00; $p < .001$.

Webinars

TAB's goal is to conduct regional and national webinars. State level webinars are conducted upon request. Three national webinars were held during the project period and advertised through TAB's network in each region. Two state webinars were also held. Over 400 attended these webinars.

- National: webinar "Brownfields 128(a)," was held on October 12, 2016. Attended by 100.
- National: webinar "Brownfields (AC Grant Proposal Guidelines)," was held on November 1, 2016. Over 200 attended.
- National: webinar "Brownfields (TAB EZ)," was held on November 2, 2016. 54 attended.
- R6: New Mexico, "Brownfields" was held June 7, 2016. 23 connected.
- R5: Minnesota, "Brownfields," was held on February 1, 2017. Attended by 45.

No surveys were administered for webinars this project year.

Invited and Other Presentations

TAB representatives routinely provide education on brownfields to a variety of organizations and events nationally and in the 21-state service area. During the reporting period, TAB participated in invited presentations at over 20 separate events, making more than one presentation at a number of these events. This includes presentations at national, regional and state conferences and workshops, as well as individual organizations interested in learning more about brownfields.

Task 2 Summation

This quarter TAB exceeded its goals for the number of workshops offered in the reporting period (30 workshops; the yearly goal is 23). TAB physically offered workshops in 16 states during the reporting period. Michigan, Montana, North Dakota, Ohio, and Wisconsin were the states not served in some way by a workshop.

TAB did not meet its goal of providing 40 webinars. In response to low interest in webinars from individual states and Regions, TAB promoted the events more widely and archived them to make them available for a wider audience of viewers. Three national and two state webinars (one in Minnesota and one in New Mexico) served each of the 21 states.

In terms of the workshops TAB delivered in the reporting period, evaluation data suggests that they were very successful on many levels. First is in terms of the population goals that TAB has for its site service. The population of workshop attendees completing evaluation surveys met TAB's site service population goals, as shown in the table below. The second indicator of success is the types of participants attending workshops. The participants in the workshop are also representative of the range of stakeholders that need to be involved in successful brownfield redevelopment.

Population levels of workshop evaluation participants

Target goals	Outcomes	Target met
50% with population of less than 100K	60%	Yes
25% with population of less than 10K	27%	Yes
One workshop/state/year	Held in 16 states	No

The third indicator of success is related to the evaluation results. There were high levels of agreement among participants that the knowledge gained by attending the workshop was useful (82% ranked 4 or higher on a 5-point scale). Their stated intentions for using the knowledge gained indicate plans to apply it in advancing brownfield redevelopment efforts. Measures of Retrospective-Post responses to questions related to perceptions were rather dramatic, as shown in the table below. Each measure was also shown to be statistically significant (not due to chance).

Changes in Retrospective/Post measures related to preparedness (somewhat to very prepared) and resources (at least ¾ cup full)

Item	Retrospective	Post	Change	Statistical Significance
Preparedness	36%	80%	+44%	$p < .001$
Resources	18%	57%	+40%	$P < .001$

Task 3. On-line E-Tools and Resources

K-State TAB continues to grow its online E-Tools and resources, providing multiple paths for its target audiences to access brownfield information. The K-State TAB website is at www.ksutab.org. During the reporting period, the site was visited 6,742 times by 3,779 different users. Of the visits by U.S. users, 73% were visits by users in the 21 states in K-State TAB's service area. Forty-seven percent of users visited two or more times. The higher number of users from KSU's service area is most likely due to use of the site for workshop and webinar registrations and downloads.

During the project year, 923 new users registered on www.ksutab.org. There are 3,903 active registered users (users who have accounts, which are required to register for workshops and webinars and to access

TAB EZ, BIT and on-line training). Of the 2,283 users who have provided data on their state, 2000 are from the 21 states in the KSU TAB service area.

TAB EZ usage data indicates that over 62 proposals were drafted in TAB EZ, and that approximately 66 other proposals were drafted outside of TAB EZ in a separate word processing program, while users viewed TAB EZ as a reference.

The KSU TAB Online Training Program Series consists of pre-recorded webinar modules, supplemental materials and review questions. A certificate is issued upon successful completion of each program and contact hours credit is available.

- We now have eight online training programs. Online training programs are available at <https://www.ksutab.org/education/training>.
 - Brownfield Basics (*Additional module on leveraging funds to be added at a later date)
 - Environmental Planning/NEPA: Using Federal Processes to Promote Local Objectives
 - Greener Cleanups for Brownfields
 - Harvesting Energy: Including Performance Contracting
 - Historic Preservation and Brownfield Redevelopment
 - Infrastructure for Green Redevelopment of Brownfields
 - Transit Oriented Development
 - Tribal TRP 128(a) Brownfields Tier I
- Under development:
 - Economic Development, Economic/Fiscal Impact Analysis, and Public Finance
 - Tribal TRP 128(a) Brownfields Tier II

Task 3 Summation

The use of the www.ksutab.org website has increased from the last reporting period, with an increase in use of the site by TAB's target audiences.

Task 4 Participatory Evaluation Summation

Progress on the development of the rubric was slower than anticipated, but the goals will be achieved within the project period. Wendy Griswold is now at University of Memphis. Oral Saulters, another one of our professional staff, has been designated to assist Wendy, who will continue to work on this without funding. KSU has teamed with the University of Memphis and is built into TAB Proposals for the next project period, which would allow for Wendy and a grad student to put more focus on this.

Conclusions

The table below shows the overall anticipated TAB Program outcomes and outputs. As the above review of program activities revealed, significant progress was made in achieving or exceeding program outputs on most of the items listed in the table below. Goals were "technically" not achieved in the areas of offering one workshop in each state and performing 40 webinars. However, these are dependent on communities and states requesting/agreeing to these activities once they are made aware of their availability. TAB far exceeded goals of total communities assisted (148), and workshops offered (30). Although states and EPA Regional partners were generally not interested in webinars, the five total webinars offered by TAB were archived, promoted widely, and made available to participants in each of the 21 states in our service area. TAB expects these areas to quantitatively improve in the next reporting cycle, assuming there is interest by state and local partners.

Overall program outcomes and outputs

Outcomes

- Increased recognition, assessment, cleanup, and sustainable reuse of brownfields to reduce environmental contamination
- Better inform and equip communities to effectively address and be involved in brownfields activities
- Greater knowledge of environmental and human health conditions in micro, environmental justice and newly created brownfields communities
- Greater community involvement, communication, and partnerships among differing stakeholders; leveraging partnerships for funding
- Enable communities to stimulate economic and other beneficial reuses of brownfields sites to improve environmental conditions and human health

Outputs

- Site specific Technical Assistance to communities, 40-60 communities/year
- 20 Workshops and 40 Webinars/year
- Update and maintain On-line E-tools and Resources (BIT/TABEZ/Additional Resources)*
- Implement Participatory Evaluation Strategies
- Annual and quarterly reporting to EPA headquarters, regional offices, TAB partners, and other interested parties

* Note: on-line e-tools are national in scope

The evaluation results indicate that program outputs are supportive of addressing outcomes.

Outcome 1: Increased Recognition, Assessment, Cleanup, and Sustainable Reuse of Brownfields to Reduce Environmental Contamination

With respect to site specific services provided, at least 1248 acres of brownfield property are being addressed. Most of the sites are related to assessment and/or cleanup activities and at least 213% involve at least one element of sustainable reuse. This count does not include the many acres associated with more than 100 area-wide assessment, coalition assessment, and planning proposal initiatives that TAB assisted communities with this year.

Outcome 2: Better Inform and Equip Communities to Effectively Address and Be Involved in Brownfields Activities

TAB's site-specific services provide opportunities for local participants to learn about the brownfield redevelopment process through real world application and involvement in their own projects. During this reporting cycle, over 148 communities participated in activities that help them develop the capacity to engage in brownfield redevelopment.

Workshops and webinars are also pathways of providing education and capacity building to communities involved in brownfield activities. Participants in TAB programs report increased knowledge of brownfields and brownfield-related topics and resources, as well as increased readiness for taking action. Workshop participants in the previous year reported significant changes in their readiness to participate in brownfields redevelopment (+44%) and in their awareness of resources available to them (+40%). These figures are being updated for this report period.

Outcome 3: Greater Knowledge of Environmental and Human Health Conditions in Micro, Environmental Justice and Newly Created Brownfields Communities

TAB continues to increase its focus on underserved communities who generally have greater resource deficiencies, including micro and environmental justice communities via interactive site-specific services with local governments, non-profits and communities, workshops, webinars and online training programs.

Outcome 4: Greater Community Involvement, Communication, and Partnerships Among Differing Stakeholders; Leveraging Partnerships For Funding

Site specific service often provides opportunities for community involvement and relationship building. TAB attended community/stakeholder community meetings, worked with communities on addressing community education and stakeholder needs, holding community re-use visioning sessions, and with communities on local workshops. All of these activities bring stakeholders together to focus their efforts on advancing redevelopment projects.

TAB workshops also provide opportunities for stakeholders to network and develop relationships. Representatives from several of stakeholder groups attend workshops. Many participants also report that they intend to share knowledge learned at the workshops with others in their community. Data from past years' webinars underscores the intentions of participants in TAB programs to communicate with others about brownfield issues: A majority of participants reported they were somewhat to very likely to relay information from the program to others.

Outcome 5: Enable Communities to Stimulate Economic and Other Beneficial Reuses of Brownfields Sites to Improve Environmental Conditions and Human Health

During the reporting period, TAB worked with communities to identify resources to assist with brownfield redevelopment efforts. TAB also engaged communities in evaluating redevelopment options. Workshops offered also increased participants perception of the resources available to them and their readiness to participate in brownfield redevelopment efforts (see Outcome 2 above).

Recommendations/Action Steps

TAB made progress on all tasks and achieved or exceeded many of its goals in the reporting period. Specific areas of focus for next year are listed below.

Site Specific Service

- Increase the number of special regional issues communities served (as a percentage of actual total communities served [148 total served this year] – goal was met based on initial goal [for 40-60] total communities served)

Workshops and Webinars

- Offer one workshop in every state or that at least serves every state; and increase the number of state-specific webinars, if state and local partners are interested.

On-Line E-Tools and Resources

- Promote the availability of online training programs
- Upon upgrades, promote the availability of the BIT – ACRES interface in the Brownfields Inventory Tool

Participatory Evaluation

- Complete pilot testing of Community Brownfield Redevelopment Capacity rubric
- Establish guidance/procedures for administering rubric and utilizing data